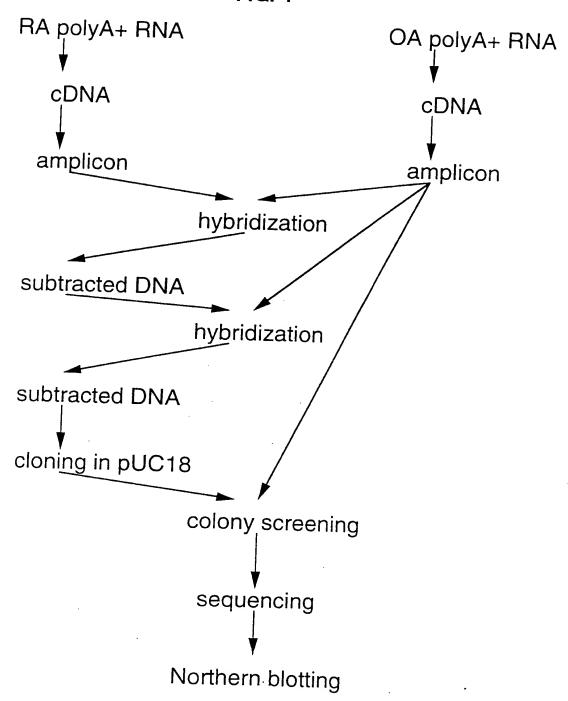
FIG. 1



## FIG. 2

semathar in VI sempthor in IV semathar in V m semathorin E semathar in ב ב ᅩ SAVCVYHLSDIQTVFNGPFAHKEGPNHQLISYQGRIPYPR SAVCVYHLSDIQTVFNGPFAHKEGPNHQLISYQGRIPYPR SAVCVYSMADTRMVFNGPFAHKEGPMYQWMPFSIGKMPYPR SAVCVYSMNDVRRAFLGPFAHKEGPMHQWVSYQGRVPYPR SAVCYYSMNDVRRAFLGPFAHKEGPMHQWVSYQGRVPYPR

h semptorin VI h semptorin IV h semptorin V semathor in III m semathor in PGTCPGGALTPNMATITKDFPDDVVTFIRNHPLMYNSIISPI PGTCPGGALJTPNMATITKEFPDDVVTFIRNHPLMYNSIIYPI PGTCPGGTFTPSMKSTKDVPDEVINFMRSHPLMYQAVYPL PGMCPSKTFGTFSXSTKDFPDDVIOFARNHPLMYNSVLPT TEGGFDXISTKDLIPDDVITEARISH PANAVNIPINM

HERPLIVRIGTOYKYTKIAVD HERPLIVRIGTOYKYTKIAVD QRRPLVVRTGAPYRLTTIAVD GGRPLFLQVGANYTFTQIAAD NNRPIWIKTDVNYQFTQIVVD

n semptorin E h semptorin VI h semptorin IV h semptorin V h semptorin II

## 

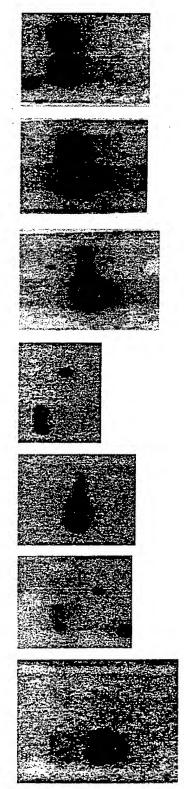
## FIG. 3

GL6SHUMAN CELK09C4 ts99 SYPAPHGPEDPAPQFAHMFENEISHRTGSWNFAPNPDKQWLLQRTSHAAPHGAPNPDKQWLLQRTAAAPHGPEDSAPQFSELYPNASQHITPSYNYAPNMDKHWIMQYTATPAPHSPWTAAPQYQKAFQNVFAPRNKNFNIHGTNKHWLIRQAK

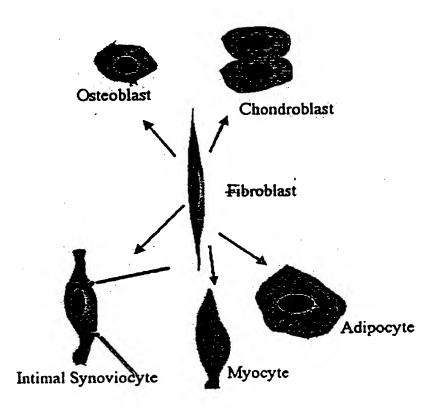
GL6SHUMAN CELK09C4 ts99 S V D E G I E R L F N L L R E L N Q L W N T S V D D S V E R L Y N M L V E T G E L E N T S V D D L V E K L V K R L E F T G E L N N T GKMNDVHISFTDLLHRRRLQTLQ GPMLPIHMEFTNILQRKRLQTLM TPMTNSSIQELDNAFRKRWQTLL

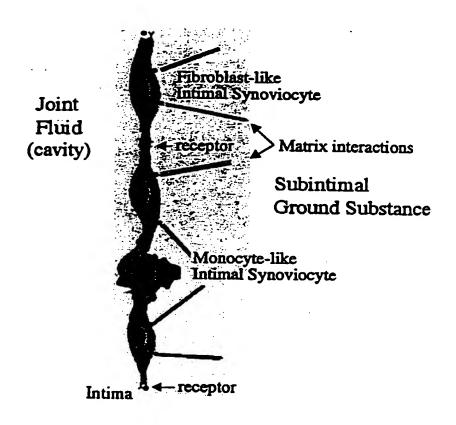
GL6SHUMAN CELK09C4 ts99 G I P R S V E P GIKP Y A I Y T S D H G Y H L G Q F G L L K G K N M P Y E F D I R V P F F M R G P Y I I Y T A D H G Y H I G Q F G L V K G K S M P Y D F D I R V P F F I R G P Y I F Y T S D N G Y H T G Q F S L P I D K R Q L Y E F D I K V P L L V R G P

FIG. 4 RA OA RA OA RA OA RA OA RA OA



semVI collagenaseIV ML2122 ML2115 lumican IGFBP5 SDF1a









Fibrolast-like intimal synoviocytes hyperplasia



Subintimal fibroblast-like synoviocyte predominance

RA OA RA OA RA OA RA OA RA OA

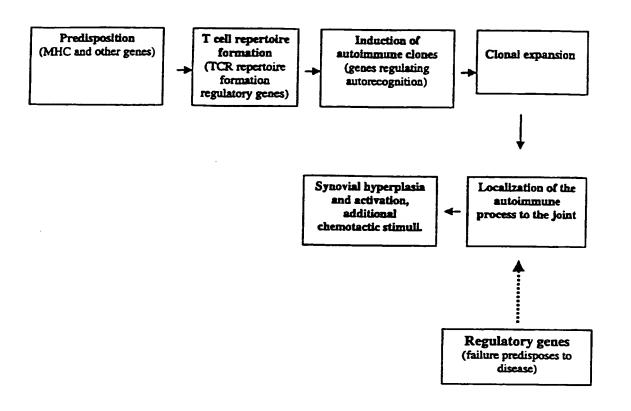


ML2122 ML2115 lumican IGFBP5 SDF1a semVI collagenaseIV

ROLLING selectins CD44 TRIGGERING chemokine-R integrins

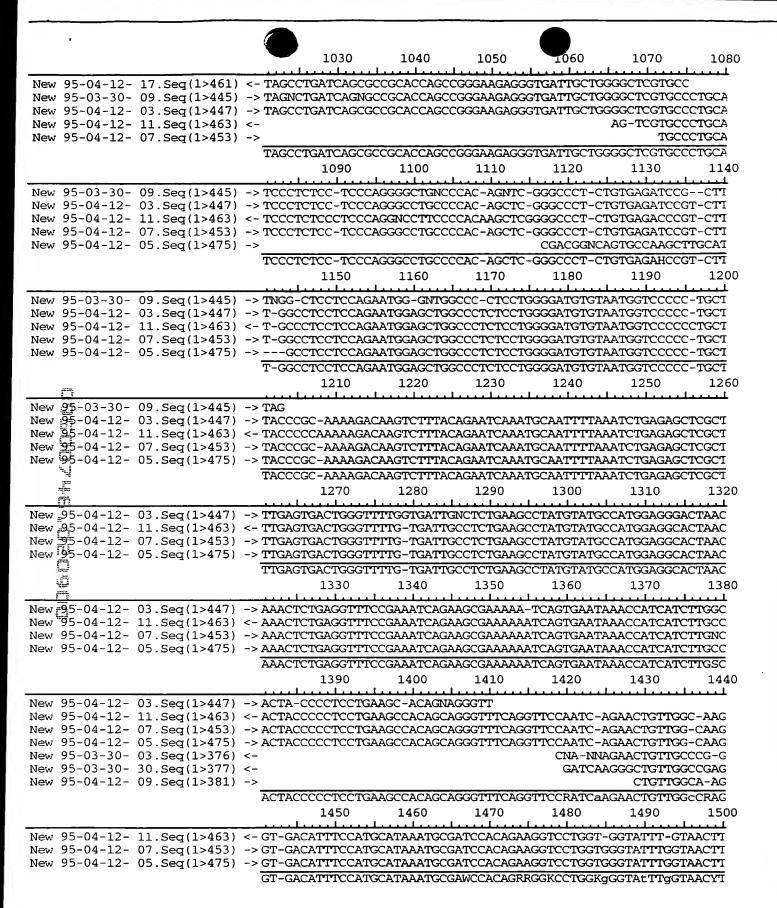
TIGHT BINDING chemokine-R VCAM-1/ICAM-1 integrins

TRANSMIGRATION chemokine-R integrins



D <u></u>	10	20	30	40	50	60
New 95-04-12- 25.Seq(1>484 New 95-04-12- 27.Seq(1>437	) <- GNNGAGTGTGGGA ) ->	CGGGGGGNGN		TAGNG-ATGGA		
	GXXGAGTGTGGGA	CGGGGGXGX				
	70	80	90	100	110	120
New 95-04-12- 25.Seq(1>484	) <- GNNNAGANANTGN	NTGGAGAANG.	ACAANGGGGGG	NGTCGNNGGAO	CNICNITICAL A	-CTYCCC
New 95-04-12- 27.Seg(1>437	) -> NTGTCGCCGTTGN	-TGTCG	-CAGATGCCCA	TGCCGATTCTT	rcgaaagccai	TGTTGC
New 95-04-12- 01.Seq(1>382 New 95-03-30- 34.Seq(1>439	) <del>-</del> >		CAGATGCCCA	TGCCGATTCTI	rcgaaagcca1	IGTIGC
New 95-04-12- 21.Seg(1>466	) <-		CAGATGNCCA	TGCCGATTCTT		
•	GTGTMGMCRTTGX	xTGKMGaaxg	aCAGATGSCCA	TGCCGATTCTT		TGTTCC
	130	140	150	160	170	180
New 95-04-12- 25.Seq(1>484)	\ <= AAGAACCCMACCTV		23 3003 00000000	lilling of the same of the sam		ليبيا
New 95-04-12- 27.Seq(1>437)	) -> CAGA-GCCAACGT(	CAANAAGGAC	AATATTTGCA AAA-ATTTTGCA	ANGNINGNINCAG ACACTCC - A A A	GGCTGTNCNC	IGGGCA
New 95-04-12- 01.Seq $(1>382)$	)	<b>ጉልልርርር አጥርጥር ፤</b>	ል ጋ ነው	$\Delta C \Delta C T C C - \lambda \lambda \lambda$		אים משמים
New 95-03-30- 34 Sect (1>419)	) -> CAGA - CCCA ACCTY	ר א ארביר א תעריתער א	איייסיסיסיסייע אוא	3 C 3 C C C C C C C C C C C C C C C C C	OMOMOGOG	
New 95-04-12- 21.Seq(1>466)	MAGA -CCCA ACCTY	CAA-CATCCC	AAA-AT-CTCA	ACACNCC-CAA	CINTICCC	TT-CA
	MAGA-GCCAACGTY	AAGCATCHCA 200				
		. 1 1	210 	220 	230	240
New 95-04-12- 25. Seq(1>484)	<- (-'''''''''''''''''''''''''''''''''	Δ Δ Δ Δ ΚΤΔ Δ C Δ Z	ערת ברר א ראר איני	רא א כיתוכית אואנכי	mmca cocca a	
New 95-04-12- 27.Seq(1>437) New 95-04-12- 01.Seq(1>382)	-> GATTGTAGCCCGGC	JUGAAGAACAA	ACAAC-AGA	CAAGTGTGCA-	TTGACCCGAA	GCTAA
New 90-00-30- 34.5ed(12439)	-> GATTGTACCCCCCC	ממשמבשמבוניי	1C22C-2-C2	אייטייטייטייטיער איי	THE RESERVE TO THE RE	
New 95-04-12- 21.Seq(1>466)	<- GATTGTAGCCCGGC	TIGAAGAACAA	CAAC-A-AGA	CAAGTGTGCAT	TTGACCCGAA	GCTAA
	GATTGTAGCCCGGC	TGAAGAACAA	CAAC-A-aGA	CAAGTGTGCA-	TTGACCCGAA	GCTaA
	250	260	270	280	290	300
New 95-04-12- 25. Seq (1>484)	<- NAGTGGATNCAGGA	なごシヤーつつ 4丁む	עד מידים – מ בזאואם.	AACAANTAAG	CCCDDCDCCC	2220
New 20-04-12- 27.3ed(12437)	-> A-(*)(*******************	CTDCC_TCCN		ים ב בחום ב בית ב ב	~~~~~~	
New 95-04-12- 01.Seq(1>382) New 95-03-30- 34.Seq(1>439)	-> AAGTGGATTCA(-;;A	GTACC-TGGA	ידידיים או אברם.	እስ እርጥ አርሞ አለር <i>ሲ</i>	CDCDDCDC C	~~~~
New 95-04-12- 21.Seq(1>466)	<- AAGTGGATTCAGGA	GTACC-TGGA GTACCCTGGA	G-AAAGCTTT? G-AAAGCTTT?	AACAAGTAAG AACAAGTAAG	CACAACAG-N	CAAAA
	AAGTGGATTCAGGA	GTACC-TGGA	GkAAAGCTTT	AACAAGTAAG	CACAACAGCC	CAAAA
	310	320	330	340	350	360
New 95-04-12- 25.Seq(1>484)	<- AGGACTTNCCGCTA	GACCCACTCC	ACCA A A ACCA A	A A COMPORTOR	<u></u>	
NCW 22 04 14 47,3801124171	-> A(J-A(" ")")	יייי אדווא איזיזיזעריי	א מרחד אות אות אייעות א	, 7 7 (1) (1) (1) (1) (1) (1) (1) (1) (1)	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
New $95-04-12-01.Sec(1>382)$	-> AGGACTTTTCCGCTA	CACCCACTCC	<b>ふごごみ み み み へのみ み</b>	$\lambda \lambda CCMMCMC\lambda$	7202002220	
New 33-03-30- 34.5ed(12439)	-> AGGACTTTCCCGCTA	GACCCACTCG	מ מידיי אל אל אליבי אל	א דירוייידיייייייייייייא א	~ A	~~~
New 95-04-12- 21.Seq(1>466) New 95-04-12- 19.Seq(1>463)	<- AGGACTITECGCTA	GACCCACTCG	AGGAAAAC1'AA	AACCTTGTGAC	GAAADTADAE NODAADT-NA	INCAA
	AGGACTTTCCGCTA	GACCCACTCG	AGGAAAACTAA	AACCTTGTGAC	FAGATGAAAGG	GSCAA
	370	380	390	400	410	420
New 95-04-12- 25.Seq(1>484)	<- AGACCTCCCCC- AC	CCCCCOMBA				
New 35-04-12- 27.Seg(1>437)	-> AGACGTGGGGGGAG	GGGGGCTTTAA	∩–∩മ–സഭമന്ദേമ	CCACCTCTCTCTC	ארייישע יוויאטי	20000
11ew 33-04-12- 01.Seg(1>382)	-> NGACGTNGNGG-AG	GGGGGCTTTAA	CC-DT-CDCCD	CCACCTCTCTCT		200 F
New 30-00-30- 34.Seq(1>439)	-> TGTTNTTGTGG-AG	GGGGCCTTAA	C-AT-GAGGA	CCACCTCTCTC	בתיתיייייי עיי	~~~
New 95-04-12- 21.Seq(1>466) New 95-04-12- 19.Seq(1>463)	<- AGACGTGGGGG-AG	GGGGCCTTAA( GGGGCCTTTAA(	C-CA-TGAGGA	CCAGGTGTGTG	TGTGGGG-TG	3GG-C
	WGACGTKGKGG-AG	GGGGCCTTAAC	CCATTGAGGA	CCAGNIGIGIC	TGTGGGGGTG	3GC-C
	430	440	450	460	470	480
New 95-04-12 25 C/1-404		1	1 1		_	
New 95-04-12- 25.Seq(1>484) New 95-04-12- 27.Seq(1>437)	<- ACATIG-ATCT-GG(	G-ATCGGGCC	ᠧᢧᢗᢗᠬᡴ᠇ᡳᡳ	ACC A THITTING A C	CCOCC A COCCA	MIN CC
Mew 30-04-12- 01.5ed(1>382)	-> ACATTGNATCTTGG	3-ATCGGGCC	ᡊᠫ᠘ᢗᡎᡴᡀᡗ᠘᠘ᡗ	רואירואיויידייויע עיבוע	יתוחות בזוריתים	TTCCCN1
New 95-03-30- 34.Seq(1>439)	-> ACATNGNATCT-GG	GTATCGGGCCT	GAGGTTTGNC	AGCATTTAGNO	CCTGNATTTA	ATNGC
	ACATTGXATCTtGG	G-ATCGGGCCT	GAGGTTTGSC	AGCATTTAGAC	CCTGSATTTA	TRGC

				430	440	450	460	470	48
New New	95-04-12- 95-04-12-	21.Seq(1>466) 19.Seq(1>463)	<- ACATTY	G-ATCT-GG	G-ATCGGGCC'	IGAGGTTIGC	CAGCATTTAG	ACCCTGCATT	TATAGC
			ACATT	GXATCTtGG	G-ATCGGGCC	IGAGGTTTGS	CAGCATTTAG	ACCCTGSATT	TATRGC
			1	490	500	510	520	530	54( 
		25.Seq(1>484)		GTATGATAT	TGCAG	· · · · · · · · · · · · · · · · · · ·			
		27.Seq(1>437)		GNNTGATNT	NIN				
		01.Seq(1>382)					~~~~~~		DCCC3.C
vew.	95-03-30-	34.Seq(1>439) 21.Seq(1>466)	-> ATACG	GCATGATAT	TGCAGNTTAT	-TICATCCAT	GCCCNCGTACC		ICC2 2C
		19.Seq(1>466)							
v-w	JJ-04-12-	19.3eq(1/403)						CTGTGCACGT	
			ATACG						
	7			550	560	570	580 	590	60 لىيىل
		34.Seq(1>439)							~ ~ ~ ~
1ew	95-04-12-	21.Seq(1>466)	<- TTTTA	TTACTGGGG	TTTTTCTAAG	AAAGAAATTG'	TATTATCAAC	AGCATITICA-	-GACA
16M	95-04-12-	19.Seq(1>463)							
			TWKTA					AGCATTTTCA	
			_	610	620	630	640	650	. 66
Ior.:	05 04 12	19.Seq(1>463)	< mmacm				TOTAL AUTOCOCI		
		17.Seq(1>461)						PARTITITA	
v⊂w	22-04-12-	17.5eq(12401)						CAAATTTTTAAAT	
			IIAGI.			690	700	710	72
			1	670	680			/10 	
lew	95-04-12-	19.Seq(1>463)							
		17.Seq(1>461)							
								IGCTCCCCTGC	
			001	730	740	750	760	770	78
	Ser.		المحمد					1	_
<b>Jew</b>	95-04-12-	19.Seq(1>463)	<- CTGGG	CACAGTCAG	GTGGTGGCTT	AACAGGGAGC'	TGGAAAAAGTY	STCCTTTCTTC	CAGACA
<b>Jew</b>	95-04-12-	17.Seq(1>461)	<- CTGGG	CACAGTCAG	GTGGTGGCTT	AACAGGGAGC'	YEGAAAAAGTY	STCCTTTCTTC	LAGACA
<b>l</b> ew	<u>9</u> 5-03-30-	09.Seq(1>445)						STCCTTTCTTC	
	- <b>-</b>		CTGGG	CACAGTCAG	GTGGTGGCTTZ	AACAGGGAGC'	IGGAAAAAGT	STCCTTTCTTC	CAGACA
	रेक्टर इन्हें ह			790	800	810	820	830	84
	14						<del></del>		لحصيا
		19.Seq(1>463)						70001 CMG1 G1	. m
		17.Seq(1>461)							
iew	<b>2</b> 2-03-30-	09.Seq(1>445)							
			CTGAG					IGGCACTCAGA	TIACCG
				850	860	870	880	890	90
Iew.	95-04-12-	17.Seq(1>461)						ICAGTGATTGG	
		09.Seq(1>445)							
								CAGTGATTG	
			710100	910	920	930	940	950	96
								ليبيانييا	
		17.Seg(1>461)							
lew	95-03-30-	09.Seq(1>445)	-> TGGGC	ICCATGTAG.	AAGCCACTAT.	PACTGGGACT	GTGCTCAGAGA	ACCCCTCTCCC	CAGCTA
		03.Seq(1>447)							CAGCTA
			TGGGC	ICCATGTAG.	AAGCCACTAT	TACTGGGACT	GTGCTCAGAGA	ACCCCTCTCCC	CAGCTA
				970	980	990	1000	1010	102
			للبيين				<del></del>	ليبيلين	لتتنيا
		17.Seq(1>461)		ACTCTCTCC	CCGACTCCGA				
<b>J</b> ew	95-03-30-	09.Seq(1>445)	-> TTCCT	ACTCTCTCC ACTCTCTCC	CCGACTCCGA( CCGACTCCGA(	GAGCATGCTT	AATCTTGCTT	CTGCTTCTCAT	TTCTG
Jew	95-03-30-		-> TTCCT/	ACTCTCTCC ACTCTCTCC ACTCTCTCC	CCGACTCCGA( CCGACTCCGA( CCGACTCCGA(	GAGCATGCTT GAGCATGCTT	AATCTTGCTT( AATCTTGCTT(	CTGCTTCTCAT	TTCTC



<b>6</b>						
	1450	1460	1470	1480	1490	1500
New 95-03-30- 03.Seq(1>376) <	- Cal-Ca Ca C	CATAAATCC	A ACCACACATAT	CONTCC - NICCO	SCONTA DEL CON	TEN COT
New 95-03-30- 30.Seq(1>377) <	C - GTCGNA ATTTCCATN	CANAAATGCG	A DUCCACAGIVIA	בכבר הכבבבה הפוורה – וותפפו	CCNIA - TT - IN	ANCCI
New 95-04-12- 09.Seq(1>381) -	-> GT-GACATTTCCATG	CATAAATGCG	ATCCACAGAA	3GGCCGGGG 3GTCCTGGT-	-GGTATTT-GT	יאאככי
35 01 12 05.Beq(1:301)	GT-GACATTTCCATG					
	1510	1520	1530	1540	1550	1560
				ليتبابين		
New 95-04-12- 11.Seq(1>463) <	- TTTGCAAGGCATTTT	TTTTATATAT	AT-TTTTGTG	GCA		
New 95-04-12- 07.Seq(1>453) -	> TTNGGAAGGNATTTN	NNNTATATAT	AT-TTTNGGG	<i>I</i> N		
New 95-04-12- 05.Seq(1>475) -	> TTGGNAAGGC-A-TT	TNINNINATAT	ATATTTNGGG(	CACATTTT	TTTTACGTTT	CTTTI
New 95-03-30- 03.Seq(1>376) <	- TITNCCAGGCAN-TT	TTTTAAAAAA	AAANTTTGT-1	CANATTTTI	TTNTACGNTT	'CNTNA
New 95-03-30- 30.Seq(1>377) <	- TITICCAGGNAATIT	I I I I AAAAAA	AA-NTTTGT-0	CACANTTT	TTTTNCGNTT	CNTNA
New 95-04-12- 09.Seq(1>381) -						
	TTKKSMAGGCAWETT		_			
	1570	1580	1590 	1600	1610	1620
New 95-04-12- 05.Seq(1>475) -	> AGAAACAAATGT-TT	ICAAAATNT'	тттат-сстс	ACAATCAAT	- <del></del>	
New $95-03-30-03.Seq(1>376) <$	<ul> <li>GNAANCCAATGTATTY</li> </ul>	CCCCAANATA	TTTANANGCGC	ACAANTC	-ANATANTTGG	AGTGG
New $95-03-30-30.Seq(1>377) <$	<ul> <li>GGANGCCNATNNATN</li> </ul>	CCCCCANATG	TTTATAGGCGN	JANAAAAA	-AAAAATTTCC	GGNGG
New 95-04-12- 09.Seq(1>381) -	> GAAAACAAATGTATT	ICAAAATATA'	TTTATAGTCGA	ACAATTCAT	'ATATTTGA	AGTGG
	GRAARCMAATGTATT	YCMMAATATR'	TTTATAGGCGF	RACAAWHMat	aaAWATTTGR	RGTGG
	1630	1640	1650	1660	1670	1680
No. 05 03 30 03 0 (1, 276)			بالتسليب	لتتبليب	لتبيليين	لببيا
New 95-03-30-03.Seq(1>376) <	- ANCCAAATGGATNTC	AGTAGTITAA	ACNTCTCTANT	ATCCCCAAC	NGCTGGCCAN	TIMIT
New 95-03-30- 30.Seq(1>377) < New 95-04-12- 09.Seq(1>381) -:	- NGCCAANTGGATTTC/	AGGAGNTNAA.	ACCTONONANT	'A'I'CCCCNNC	CNCTGGCCAT	TTTTT
1444	AGCCAVATGRATKTCA	AGIAGITIATI	ACTICICIATI	ATCTCAAAC	TACTGGCAAT	TIGTA
5 7 7						
	1690	1700	1710	1720	1730	1740
New 95-03-30- 03.Seq(1>376) <	<ul> <li>NAGNAANAAANATGAZ</li> </ul>	AAANGAATN	IGGTTTCAGCN	TTTCCATNT	TAACCNCAGT	NGATT
New 95-03-30- 30.Seq(1>377) <	- AAGGNAAAAAAATGA	AAANNGATN	IGGTTTCAGCC	TTTCCATNN	TTAACCNCAGT	NNAAT
New \$5-04-12- 09.Seq(1>381) -:	> AAGAAATATATATGAT	TATATAAATG	IGATIGCAGCI	TTTCAATGT	TAGCCACAGTY	GTATI
7	AAGRAAWAWAWATGAV					
=	1750	1760	1770	1780	1790	1800
105			<del></del>	لتبتلتين		1
New \$5-03-30-03.Seg(1>376) <-	- TITTCACTININCCA	AATTNTACCO	CNATNINACAN	TAAATNCCC	TANCNAANAA	ATTCN
New 95-03-30- 30. Seq(1>377) <-	- TITICNCTINNNCCN	IAATTNINNCC	CATNINGCNI	TAAATTCCC	NANCCAAANA	ATNCN
New 25-04-12- 09.Seq(1>381) -	> TTTTCACTIGTACTAA	AATTGTATCA	AAATGTGACAT	TATATGCAC	TAGCAATAAA	ATGCT
	TTTTCACTTXTXCYA	AATTXTAYCI	MATXTXRCAT	TAWATKCMC	TAXCMAWAAA	ATKCX
Touri	1810					
New 55-03-30- 03.Seq(1>376) <-	- GATT	_				
New 95-03-30- 30.Seg(1>377) <-	- NA					
New 95-04-12- 09.Seq(1>381) ->	> AATTGTTTCATGGGTA	ΔA				

RATIGTTICATGGGTAA